

The DX Bulletin

America's Premier Weekly Amateur Radio Publication

SPECIAL REPORT

On the Air From Libya
The 5A0A Story

In late 1986 and early 1987, Hebert Trzaska SP6RT made more than 35,000 contacts from this increasingly rare North African spot. His story is a inspiring example of the resourcefulness and dedication of an active DXer, and well reflects the true spirit of furthering international goodwill through DX.

First Steps

Bert arrived in Libya in the fall of 1985, as guest of the Socialist People's Libyan Arab Jamahiriya (SPLAJ), to teach in the electrical engineering department of recently erected Garyounis University, in Benghazi. He was immediately impressed by the Libyan people. "Contrary to Europeans, the Libyans are much more kind and helpful. Reverses of fortune they bear with stoicism without loosing nerves, excitements, or quarrels," Bert explains.

Bert's first act upon arriving in Libya was to apply for permission to operate amateur radio equipment. He cited his on-going research into electromagnetic susceptibility (TVI and RFI) and propagation research as his reasons.

A full nine months and many inquires later, Bert's amateur permission came through. Unfortunately, he was unable to bring any radio gear in Libya at that time, nor was he able to get his own gear shipped from Poland. Can you imagine the frustration of a DXer in Libya with a license, but no gear!

A resourceful amateur in the electrical engineering department of a university is not at a total loss, however. Bert searched through the lab equipment and found an excellent Rohde-Schwartz receiver, model EK-070, that would cover the amateur bands. The search turned up nothing that would serve as a transmitter, however.

Bert asked the various amateur radio and DX foundations for assistance, but most wanted assurance that the operation would count for DXCC before providing gear. His comments on this situation are worth quoting at length:

I was unable to understand why ARRL had to poke its nose into Libyan affairs. My operating privileges have been issued by legal, internationally recognized authorities of the country and any other foreign examinations of legacy could be given up.

Of course, it is necessary to verify operations from areas of un-clear

administration, inaccessible areas, etc., but in the case of Libya? Maybe someone of the ARRL would like to go there and would try to operate from there without appropriate authorization? Good luck!

Getting On the Air

No wanting to wait for the ARRL's decision before he got on the air, Bert continued to check out the lab's high power signal generators, but all had terrible frequency stability. Finally he located a transmitter, of sorts. The university's lab included a Wavetek 178 signal generator that could pump out as much as 1 watt, under ideal conditions. Unfortunately a jury-rigged amateur antenna is not necessarily ideal, and Bert was able to squeeze only a third of a watt out of the generator. He increased this slightly by feeding the antenna through an attenuator. The improved impedance match more than compensated for the 3 dB attenuation, and he was on the air with a half watt into the antenna!

The arrangement was far from perfect. To switch from receiving to transmitting, Bert had to key the operating frequency and power output out of memory of the signal generator, and execute the change. Not exactly QSK. Nor was the antenna easy to tune. His operating position was surrounded by high-power broadcast transmitters, which swamped available impedance measuring devices. Keying the rig was yet another problem. The signal generator could not be keyed directly, as it took too long to reach a stable frequency. Lacking alternatives, Bert decided to key the antenna circuit. After failing to find any suitable key, Bert resorted to tapping a banana plug into a socket to key his signal. While continuing to scrounge for parts to build a simple amplifier or even a matching network, Bert fired up this improvised station as 5A0A on 14005 kHz on Nov. 22, 1986, and logged G6ZO for his first QSO.

QRpp Operation

Over the next three months, Bert logged nearly 6,000 contacts on every continent in more than 60 different countries with his half watt. The first 2,000 QSOs were made with his makeshift "keyer." The DX Bulletin reported at the time that Bert's CW was "very slow, and often strange." No wonder, with that setup!

Gradually the amateur community began to help out. DJ2BW and DK1RV sent an electronic keyer to Bert at the end of January, and Bert's QSO rate doubled. Bert comments, "Only these two had really decided to start to do something before ARRL finished its considerations. May there be more such 'doers' instead of 'thinkers' and 'talkers.' I would like to strongly emphasize their kind act. I do appreciate it." Then, following the ARRL's acceptance of Bert's 5A0A operation for DXCC credit, the fledgling European DX Foundation chipped in a Yaesu FT-901D transceiver.

An attempt to erect a tribander donated by the INDEXA failed, due to lack of rotor and cables, and difficulties with Customs. Bert continued to use dipoles about 20' high for the rest of his operation.

Observations on the Bands

Bert had little trouble working Europe with his modest station. In fact, almost 29,000 of his 35,000 QSOs were with European DXers. He worked 3,700 North American hams, and 2,300 Asians, but only a handful of Oceania, South American, and fellow African amateurs. His totals show 8100 SSB contacts and 27400 on CW. He just missed 5BWAC, lacking only an Oceania station on 80.

Bert made a particular effort to work as many stations as possible, but had to struggle through much QRM. He compares the pile-ups with the queues in meat

shops in his native Poland. But he hung in there, and maintained a iron fist on the pile-ups. Some of the things Bert did to keep control of the frequency were to answer questions only when asked during a QSO, not to answer obvious questions (What country is 5A?), and not to accept many skeds for other bands. On the later, Bert explains, "I did not make skeds as a rule: if you want me, catch me. Moreover, very often I was unable to say if at a particular moment I would be able to get on the air at all, because of my duties at the University, local QRM, or one of thousands of other reasons."

The usual DX "policemen" harassed his operation, particularly because his QSL manager, SP6BZ, was not listed in the latest Callbook. He avoided list operations with the single exception of Jim Smith VK9NS's net, which he used to work South Pacific stations.

His only real operating problem came from DXers seeking "insurance" contacts, duplicating QSOs made on the same band and mode. Since Bert was trying to work as many stations as possible, not make as many QSOs as possible, each such "insurance" contact reduced his chances of giving out Libya as a New One. Some DXers called more than 10 times, and soon found themselves on Bert's 'Black List.' "They'll find their wait for a 5A0A QSL to be a long one!" Bert says. "Fortunately the list contains very few call signs; unfortunately, the majority of them are well known DX-men."

Bert reports that his contacts with US stations were very good: "I would like to express my admiration for W1, W5, W7, and W0 operators. I never had problems with W4 and W6, a few problems with W2 and W3, and I lost a lot of nerves in contacts with W8 and W9. Especially NIDXA should change its name to NIDXCo., Limited. (Limited exchange of information between them.)"

Bert's operating schedule varied from day to day, but he spent much of his free time on the air, perched on his hard lab stool, in front of the rig, swatting at mosquitos, calling CQ 20. Sometimes his teaching duties pulled him away from the rig at hours of prime propagation, but his job did take precedence over the radio activities. Still, he was successful at working enough stations that he could occasionally call CQ and get no response. He took these opportunities to try some other bands, and work some SSB as well as CW. He even managed a few dozen QSOs on 160 meters, before a rig problem forced him off the band.

Bert wrapped up his 5A0A operation on July 1, 1987, after logging 35,569 QSOs in 167 countries. He expresses his thanks to those who provided invaluable assistance, including DJ2BW and DK1RV for the keyer, DK9KD and the European DX Foundation for the rig, the SPLAJ authorities for operating permission, his QSL manager SP6BZ, and his co-workers and friends at Garyounis University for their support.

 * **Madison Electronics Specials for TDXB Readers** *
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REVIEW

Terminator

a computer software review

by Bob Locher W9KNI

DX'ers who own IBM PC's or compatibles will be delighted with "Terminator," a PC program which emulates the expensive "Geochron" clock, and brings many of the characteristics of "The DX Edge" to the PC. The program displays on screen a world map showing the location of the day/night divider line (the Terminator, a.k.a. the Grey line) across the world, with the night portion shaded. Correction is made for the north/south position of the sun for the date, so that 24 hour days or nights are shown in the polar regions. Also displayed are the location of the sun, and the time in various key cities, including automatic correction for daylight savings time. Time is read from the DOS date in the computer, so if you have no automatic clock, and don't enter the proper date, you will see where the sun was on January 1, 1980!

Left to itself, the program slowly tracks the sun, updating the display every few minutes in showing the movement of the earth. However, a fast mode lets you see the effects more readily, useful for determining sked times. Speeds are 2 minutes, 6 minutes, 1 hour, 1 day, or 1 week per scan. Or, while in fast mode, you can enter any date after 1980, to set up future skeds. There is also a HELP screen available.

The program can be configured as a memory-resident program or can run by itself. It politely exits when finished, restoring you to a previous program. Some customization is possible, including locating QTH's on the map by inserting longitude and latitude, such as ST2SA's for that 75 meter sked. The program works on all video displays, including composite, Hercules, CGA and EGA. The graphics are superb, and the program is easy to use. Though not specifically designed for DX'ers, it is sure to be a popular DX'ing tool. Terminator is available from Spite Software, 4004 SW Babur Blvd., Portland, Oregon 97201 USA for \$ 39.00 plus \$3.00 shipping and handling. Phone # 1-800-237-9111, Visa/MC accepted.



The Terminator display screen for 1542Z on Dec. 22, 1987. Note the 24-hour sun in Antarctic regions. The spot marking the sun is west of Rio de Janeiro.

AWARDS

GCR/IRC/SASE
The Lingo of Awards Hunting
by Ted Melnosky K1BV

Just as in DXing (an abbreviation in itself), awards hunting has developed its own language. The most important term gained the status as a standard due to the efforts of K6BX, during the 60's and 70's. That term is GCR.

GCR stands for the General Certification Rule, the generally accepted method of proving that you have made the necessary contacts or actually possess the needed cards for some award. In its basic form, the applicant provides the sponsor with a list of the contacts or QSLs which meet the requirements of the award and swears that the information is correct. The GCR is a separate area on the application which contains a statement such as: "The information and/or the QSL's required for this award have been checked and are certified as being correct by the following radio amateurs". Almost all sponsors require two signatures and associated dates of witnessing. Some will require club officers to sign. Others will specify officials of an IARU associated club, and others ask for the signature of the National Organization person who does this. (presumably as a full time job?). Personally, I have never had problems by using two different, regular, non-official type ham buddies who humor me with such things on a sporadic basis. But read the award rules carefully, and comply if at all possible.

IRC stands for International Reply Coupon, the universal unit of exchange among awards hunters. These will purchase postage and pay for shipping and printing of the certificate in most cases. Sponsors generally request 5 to 10 IRC's as an award fee. I would be leery of any award requiring over 15 IRC's unless it is a very special medallion or work of art. IRC's are often available at reasonable cost from QSL managers who advertise in *The DX Bulletin*. The official cost from the Post Office is \$0.80. Note: they are good only if the current edition is used (they change on an irregular basis) and are stamped by the issuing office on the LEFT hand side. One IRC is good for a surface letter. Your *Callbook* has a table of IRC's needed for airmail returns.

SASE means Self-Addressed Stamped Envelope. SAE means Self Addressed Envelope (use with IRC's). Use one or the other when communicating with sponsors, since postage is one of their biggest expenses. They are not needed when applying for the award itself, since the fee includes mailing costs.

Now that the preliminaries are over, let's get into some awards next month. (Ted publishes the K1BV Directory of DX Awards).

Changes to CQ's Award Program

CQ Magazine has updated their award program, in anticipation of increased interest as sunspots and numbers of Novices improve. For example, they have clarified the rules about in which zone China stations lie. BY3G-L, BY9A-F, BY9T-Z, and BY0 stations are in Zone 23. (Other stations in Zone 23 are JT and UA0Y stations.) All other BY stations are in Zone 24. The WAZ award can be earned on RTTY, with a Nov. 15, 1945 start date. The WAZ is also available for Novice class DXers, with a January 1, 1952 start date.

CQ offers the Worked Novice Zones for working 25 of the 40 zones in the CQ WAZ program. It is available only to holders of the US Novice or Technician class, and all contacts must be made before upgrading (although the applicant can up-grade after making the QSOs, before applying for the award. Since the rules for WNZ and WAZ are otherwise the same, the first 25 zones under WNZ can be applied to the regular WAZ program.

DX Bullets Earn Trophy

In answer to numerous requests as to the fate of *The DX Bulletin's* women's slow-pitch softball team, here's the real scoop. The Bullets faltered in the stretch, losing their last two games. If they had won either of those games, they would have finished at the top of their division.

Their third place finish did earn them a berth in the post-season tournament, where they soundly defeated the second-place team, before losing to the champions in the final game. The happy sponsor was presented with a handsome trophy for the second-place finish (see below), and he is looking forward to an even better season next year.



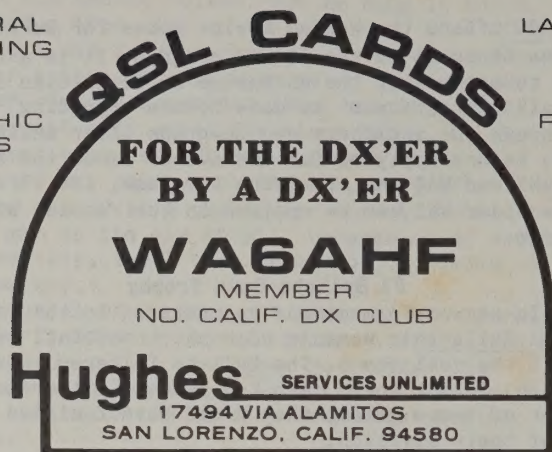
DX Quiz Answers

How did you do on the W100's DX Quiz, presented last month? Did you have to cheat and look up some of the answers? To check yourself, here are W100's correct answers:

1. Marion Island
2. 5: Venezuela, Mexico, Yugoslavia, Chile and XF4
3. Kaare is LA2GV, Einar is LA1EE
4. BX1BC
5. 316, as of January 1, 1987.
6. First was Labrador, April 1, 1949. Latest was the Saudi-Iraq neutral zone, on Dec. 26, 1981.
7. ZK3-Tokelau, AY3-Argentina, H24-Cyprus, 4C-Mexico, AK9-Cocos-Keeling, UP7A-Ukraine, CS5-Portugal, TP2CE-France, 6P2-Pakistan, YX-Venezuela, TV7-France, 5L7-Liberia, VX9-Sable Is., IM0-Italy, and T20-Tuvalu.
8. Geyser Reef, Blenheim Reef
9. 5T7H-Gus, VK9YW-Bob, 9N1MM/7-Rusty, 3B7CF-Jacky, and 5A0A-Bert.
10. Bangladesh, Seychelles, Sao Tome, Sweden, Poland, Sudan, Southern Sudan, Egypt, Greece, Dodecanese, Crete, Mouth Athos.

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